



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,522	07/02/2003	Cameron D. Patterson	X-1405 US	5307
24309	7590	09/14/2005	EXAMINER	
XILINX, INC ATTN: LEGAL DEPARTMENT 2100 LOGIC DR SAN JOSE, CA 95124			ELMORE, STEPHEN C	
			ART UNIT	PAPER NUMBER
			2186	

DATE MAILED: 09/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

47

## Office Action Summary

Application No.

10/612,522

Applicant(s)

PATTERSON, CAMERON D.

Examiner

Stephen Elmore

Art Unit

2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-21 is/are rejected.
- 7) ☒ Claim(s) 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
- Paper No(s)/Mail Date 7/2/2003.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

  
STEPHEN C. ELMORE  
PRIMARY EXAMINER

Art Unit: 2186

**DETAILED ACTION**

1. This Office action responds to the application filed July 2, 2003.
2. Claims 1-22 are presented for examination.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 18-21 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Schultz et al., US Patent 6,255,848, (Schultz).

Schultz teaches the claimed field programmable gate array FPGA (claim 18), note Figures 4, 5, 7D, 10 and 15, as a field programmable gate array (FPGA) comprising: means for retrieving a first set of data [data frame F1] from a first section of a configuration memory of the FPGA and means for storing the first set of data [F1] retrieved from the first section of the configuration memory, see col. 18, line 35 - col. 19, line 55, these features are taught, the data in frame F1, in Figure 7D can be retrieved from, and stored to, memory array 125 using configuration bus 415 for transferring the first set of data from the means for storing the first set of data directly to a second means for storing the first set of data, that is, transferring the data retrieved from F1 through Frame Data Output Register 457 across the configuration bus 415 to Frame Data Input Register 452 according to read and write commands implemented in the Command Register 420 by use of the Configuration State Machine 470; and means for transferring the first set of data from the second means for storing the first set of data to a second section of the configuration memory of the FPGA, these features are taught as transferring the data stored in frame F1 in the memory array 125 through Frame Data Output Register 457, as a result of a read command being applied to the memory array, then that data transmitted across configuration bus 415 to Frame Data Input Register 451, into memory array 125 and stored at, for example, a different

Art Unit: 2186

frame location such as F2 as a result of a write command being applied to that data to write that data to a different frame location;

Claim 19,

wherein the first set of data comprises data stored in a single column of the configuration memory, this is taught as data frame F1 is stored in column form in the array 125;

Claim 20,

wherein the means for retrieving the first set of data comprises means for retrieving the first set of data from the first section of the configuration memory in parallel, this is taught as reading frame F1 in parallel into element 720, col. 9, line 3;

Claim 21,

wherein the means for transferring comprises means for shifting the first set of data onto the configuration bus as a plurality of data words, taught by the shifting activities of element 720 and 760, see col. 18, lines 51-59.

#### ***Allowable Subject Matter***

5. Claim 22 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. Claims 1-17 are allowable over the prior art of record.

#### ***Conclusion***


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Elmore whose telephone number is (571) 272-4436. The examiner can normally be reached on Mon-Fri from 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Kim can be reached on (571) 272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2186

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 12, 2005

  
**STEPHEN C. ELMORE**  
**PRIMARY EXAMINER**